Science and engineering profile: Michigan

Characteristic	State	U.S. total	Rank
Employed SEH doctorate holders, 2006	17,900	620,140	12
S&E doctorates awarded, 2007	1,163	31,801	8
Engineering (%)	33	24	–
Life sciences (%)	19	26	–
Physical sciences (%)	14	13	–
SEH postdoctorates in doctorate-granting institutions, 2006	1,373	49,201	9
SEH graduate students in doctorate-granting institutions, 2006	18,885	542,073	9
Population, 2008 (thousands)	10,003	308,014	8
Civilian labor force, 2008 (thousands)	4,936	155,366	8
Personal income per capita, 2007 (dollars)	34,423	38,615	34
Federal spending			
Total expenditures, 2007 ($millions)	71,652	2,532,073	9
R&D obligations, 2006 ($millions)	1,681	107,545	19
Total R&D performance, 2006 ($millions)	18,189	335,377	3
Industry R&D, 2006 ($millions)	16,477	243,853	2
Academic R&D, 2007 ($millions)	1,510	49,406	11
Life sciences (%)	60	60	–
Engineering (%)	17	15	–
Social sciences (%)	9	4	–
SBIR awards, 2000–07	937	44,157	13
Utility patents issued to state residents, 2008	2,996	77,493	6
Gross domestic product, 2007 ($billions)	382	13,832	12

– = no value possible.

S&E = science and engineering; SEH = science, engineering, and health; SBIR = small business innovation research.

NOTES: Rankings and totals are based on data for the 50 states, District of Columbia, and Puerto Rico. Rankings are based on unrounded totals; they do not account for margin of error of estimates from sample surveys. Employed SEH doctorate holders include only recipients of U.S. doctoral degrees. State estimates for employed SEH doctorate holders may have large sampling errors because the source for these data, the Survey of Doctorate Recipients, was not designed to provide a sample for estimates at the state level; these data are classified by the state where the doctorate holder resides, if known; otherwise, data are classified by employer's location.

Federal obligations for research and development, by agency and performer: Michigan, FY 2006

(Thousands of dollars)

		Performer						
Agency	Total	Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State, local governments	Rank
All agencies	1,680,908	196,552	0	708,169	726,966	40,780	8,441	19
Department of Agriculture	27,212	6,111	0	0	21,091	10	0	31
Department of Commerce	12,979	6,239	0	4,709	2,031	0	0	16
Department of Defense	868,833	175,052	0	643,179	49,204	568	830	17
Department of Energy	38,442	0	0	6,564	27,964	3,914	0	17
Department of Health and Human Services	547,047	654	0	20,683	487,146	34,843	3,721	11
Department of Homeland Security	4,102	692	0	18	709	0	2,683	25
Department of the Interior	6,510	6,052	0	0	235	0	223	18
Department of Transportation	27,906	425	0	23,147	2,665	685	984	5
Environmental Protection Agency	5,830	1,327	0	382	3,891	230	0	16
National Aeronautics and Space Administration	23,025	0	0	6,021	17,004	0	0	20
National Science Foundation	119,022	0	0	3,466	115,026	530	0	11
Rank	19	19	–	17	9	23	13	–

– = no value possible.

FFRDC = federally funded research and development center.

NOTES: Federal R&D obligations are as reported by funding agencies. Rankings and totals are based on data for the 50 states, District of Columbia, and Puerto Rico.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Statistics. Data compiled from numerous sources; see the section, "Data Sources for Science and Engineering State Profiles."